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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,761	07/08/2003	Joseph Domenick Montalbo	08211/0200236-US0/P0550	9899
38845	7590	09/02/2005	EXAMINER	
DARBY & DARBY P.C.			LEUBECKER, JOHN P	
P.O. BOX 5257			ART UNIT	
NEW YORK, NY 10150-5257			PAPER NUMBER	

3739

DATE MAILED: 09/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SW

Office Action Summary

Application No.

10/615,761

Applicant(s)

MONTALBO ET AL.

Examiner

John P. Leubecker

Art Unit

3739

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-8,13,15-20,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 2,9-12,14,21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>6/16/04 & 8/24/04</u> . | 6) <input type="checkbox"/> Other: _____ |

Specification

1. The abstract of the disclosure is objected to because the phrase “The present invention” is improper. In addition, the term “laminator” in line 3 should be –illuminator--. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. While claim 7 specifies that the illuminator comprises an *acoustical* illuminator, claim 1, from which claim 7 depends, specifies that the illumination from the illuminator is transmitted by an *optical* device. The specification fails to elaborate on how the optical device is “configured to transmit” the acoustical illumination.

4. Claim 24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claim 24, term “the sensors” (lines 1 and 6) lacks antecedent basis.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 13, 15, 18-20, 23 and 24 are rejected under 35 U.S.C. 102(a) as being anticipated by Iddan (US 2003/0195415).

Iddan discloses capsule endoscope for use in the GI tract ([0017]) (40, Fig. 1) having sensors (44) that may be formed to follow a contour associated with the capsule (Fig. 3), comprising producing, transmitting and sensing acoustic illumination ([0020]) and dynamically adjusting the field of view (note sequential energizing of the elements 44 in last sentence of [0022]). As to claim 15, the sequential energizing pattern constitutes scanning. As to claim 18, note that optical illumination and sensing can be used in addition to the ultrasonic imaging ([0016]). As to claim 19, the illumination is acoustic (ultrasonic imaging). As to claim 20, note wireless transmission of signals ([0022]). As to claim 24, note that Applicant has admitted that the means for forming the sensors (the processes, and thus the structure for performing the processes) are conventional (page 8, line 13 to page 9, line 10), and thus would be anticipated by the existence of such.

It is noted that the only reason that Iddan does not anticipate claim 7 (which depends on claim 1) is the occurrence of the term “optical” with respect to the element configured to transmit the illumination in claim 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 3-6, 8, 13, 15-18, 20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anvi et al. (US 2003/0117491) in view of Barbato et al. (US 2003/0130562).

Anvi et al. disclose a capsule endoscope having an illuminator (63A,63C, Fig.3), an optical device (61) configured to transmit the illumination, a sensor (64) for sensing a reflected signal and a controller (40A) for controlling the illuminator. Anvi uses a traditional two dimensional image sensor (e.g., CMOS, [0034]) but teaches that any other suitable type can be used ([0034]). Barbato et al. teaches a miniature imaging device which includes an illuminator (122a, 123a, Figures 2A or 3) that is capable of being scanned (dynamically adjusted) ([0040] and [0041]). Barbato's imaging device is designed to be used inside the body, and is smaller than traditional imaging devices ([0006]) and inexpensive to manufacture ([0048]) while providing a high quality image (last line of [0034]). For these reasons, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the

Art Unit: 3739

imaging device of Barbato et al. as an alternative to the traditional imaging sensor of Anvi et al. Such modification, using the embodiments shown in at least Figures 2A and 3, would provide a controllable (note last sentence of [0036]) illuminator which dynamically adjusts the field of view. Therefore, the limitations of claims 1 and 23 are met. As to claims 3 and 4, note [0036] of Barbato et al. As to claim 5, the focusing lenses in Barbato et al. (122b, 123b, Figs. 2A and 3) form a lenslet array. As to claim 6, the illuminator is optical (e.g., LED). As to claim 8, note wireless communication link in Anvi et al. (telemetry unit 34). The method steps recited in claims 13, 15-18 and 20 would inherently be anticipated by the use and/or operation of the combination of Anvi et al. and Barbato et al. proposed above. Note that Anvi et al. specifically mentions use of the capsule endoscope in the GI tract ([0003]). As to claim 24, note that Applicant has admitted that the means for forming the sensors (the processes, and thus the structure for performing the processes) are conventional (page 8, line 13 to page 9, line 10), and thus would be anticipated by the existence of such.

Allowable Subject Matter

9. Claims 2, 9-12, 14, 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3739

McKenna et al. (U.S. Pat. 6,261,226)—note curved sensor and illumination arrangement (Figs. 18-20).

Hokari (U.S. Pat. 6,285,400)—note actively flexible image sensor and substrate.

Hamm et al. (U.S. Pat. 6,830,135)—note sensor array with flexible substrate.

Ostrovsky (U.S. Pat. 6,895,270)—note optical scanning.

Yokoi et al. (US 2003/0171653)—note capsule endoscope.

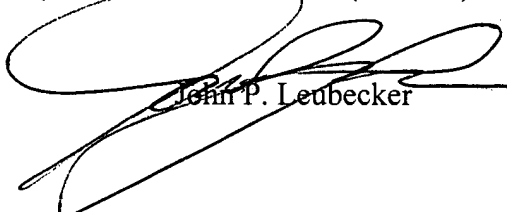
Madar et al. (US 2004/0092825)—note capsule endoscope.

Irion (US 2004/0249245)—note capsule endoscope.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John P. Leubecker

Application/Control Number: 10/615,761

Page 7

Art Unit: 3739

Primary Examiner
Art Unit 3739

jpl